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ABSTRACT

The Appalachian Adolescent Health and Education Project (AAHEP), in operation for 3 years, is a program designed to reduce adolescent pregnancy rates (prevention component) and provide care for pregnant teenagers (care component) in East Tennessee. Limitations in funding and service delivery prompted the AAHEP to modify its 15-county scope by concentrating its care efforts in 3 counties and its prevention efforts in 2 counties. A review of statistics for the 15-county AAHEP area, the 5-county target area, the 10-county non-target area, and a 3-county control area revealed qualitative and quantitative changes that, although they could not be definitely attributed to the project, seemed strongly associated with project efforts. Target county care services such as counseling, pre-natal care, information on child-care and parenting, introduction to primary care system, determination of sources of payment for medical services, and adoption options, were associated with a reduction of low birth-weight babies born to teenage mothers. Prevention efforts, which included educating high school students about male/female puberty, male/female reproduction, contraception, fetal development, sexually transmitted diseases, decision-making skills, and values education, appear to have reduced the incidence of adolescent births, especially in counties where service has been most intense. (Extensive tables and demographics are included.) (ABB)

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APPALACHIAN ADOLESCENT HEALTH EDUCATION PROJECT (AAHEP) EVALUATION: A STUDY OF TEEN PREGNANCY IN EAST TENNESSEE (1982-1985)

Paper presented
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APPALACHIAN ADOLESCENT HEALTH EDUCATION PROJECT (AAHEP) EVALUATION: A STUDY OF TEEN PREGNANCY IN EAST TENNESSEE (1982-1985)*

INTRODUCTION

Adolescent pregnancy is a major problem for educational institutions and the society in general. Educators are faced with a vast array of questions pertaining to this issue. Two major questions are how to prevent adolescents from becoming pregnant and how to provide appropriate educational and health-related facilities and services to those who do become pregnant.

In the Mid-South region the pregnancy rate is of special concern because of the alarmingly high rates reported in those states. The rates reported in the most recent statistical data (NCHS, 1980) indicate that the pregnancy rate per one thousand teenagers in the United States was 53.0. In the State of Tennessee, however, this same rate was 64.1 per one thousand teenagers, placing Tennessee 16th among the 50 states in teen pregnancy rates. Other states in the Mid-South region have even higher teenage pregnancy rates. They are as follows: Mississippi (87.7; 1st); Louisiana (76.0; 3rd); Arkansas (74.5; 5th); Kentucky (72.3; 7th); Georgia (71.9, 8th); Alabama (68.3; 10th). (See Appendix A.)

These extremely high adolescent pregnancy rates and the attendant, often long-lasting economic, emotional and social difficulties experienced by teenagers and subsequently their children and society, have brought about intervention by the federal government. Through the Office of Adolescent Pregnancy Programs (OAPP), several pilot projects have been funded to try to reduce adolescent pregnancy rates and to provide adequate care for those who do become pregnant.

One project funded by the OAPP beginning in October, 1982 was the Appalachian Adolescent Health and Education Project (AAHEP). The Bureau of Educational Research and Service (BERS) of The University of Tennessee was

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designated as an external evaluator for this project. When it initially began operating, AAHEP was designed to serve a fifteen-county (over 600 square mile) rural area of East Tennessee (See Figure 1). The original project goal involved serving each county with equivalent levels of service. Service was divided into two components: CARE--to improve the level of medical and developmental care provided to pregnant adolescents; PREVENTION--to reduce adolescent premarital sexual relations and adolescent pregnancy.

Following the first year of operation, modifications were made in the area served by the AAHEP staff due to the realities of trying to serve such a large area with the limited funds available. Along with limitations in funding, other difficulties were manifested. For example, the evaluators noted that the dispersed nature of the project in this mountainous, rural, Appalachian region at times made service delivery difficult or impossible. Other problems included significant staff turnover (the project now has its third director) and lack of "control" counties for comparison.

Beginning in the second year, the project's scope changed significantly. Rather than serving the entire fifteen-county region the focus was changed to concentrate most of the available resources and staff effort in "target" or "primary" counties. The care component focused its efforts in three counties while the prevention component worked through seven target high schools located in two additional counties. Thus during the second year, the project moved from its fifteen-county focus to maximum service in five primary target counties and less service in the ten other counties termed non-target (service provided as time and funds permit).

AAHEP, currently in its fourth year of operation, has undergone several changes in evaluation design and project focus. One recent change in evaluation strategies has been the introduction of three "control" counties located in East Tennessee. These three counties, not served by AAHEP, are used for comparison purposes. The three were chosen for their similarity and proximity to the 15 AAHEP counties. Throughout the three-year duration of the project, however, the major goals of providing <u>care</u> for pregnant adolescents and <u>prevention</u> of adolescent pregnancy have remained consistent. To accomplish the goals most effectively the project directors and evaluation team developed objectives that the care and

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Figure 1. Map Showing AAHEP Area.
Counties Marked with //// are Control Counties.
(Knox County Not Included in Study)

prevention components would use for operational guidelines. (See prior reports.)

This study was limited by several factors. It was impossible to obtain a true control group since all youth ages 11-18 in the target counties were eligible for services. The three comparison counties were similar in characteristics and were contiguous to the project counties. As shown in Table 3 (p.8) the teenage pregnancy rates for the comparison counties, the 15-county area, the 5 "target" counties and the 10 "non-target" counties have been similar from 1980-1984, and for the "baseline" which was determined by computing the rate for the two-year period just prior to AAHEP intervention (1980, 1981).

The AAHEP staff had no control over many variables. Initiation of AAHEP services was the "treatment" or "intervention"; there are four populations: the 15-county area, the 5-county target area, the 10-county "non-target" area, and each county. At best the study is ex post facto and descriptive in nature. All evaluative inferences are drawn from records, rates, means, percents, and comparisons either to historical data or the three "control" counties. There are, however, qualitative and quantitative changes that, although they cannot be positively attributed to the project, seem strongly associated with project efforts. These results are similar from year-to-year, providing a type of repeated measure. The evaluators and AAHEP staff continue to be confident that the changes are, at least in large measure, the result of constant achievement of the care and prevention goals.*

CARE COMPONENT RESULTS

The primary objective of the care component is as follows:

> To offer care services to a minimum of 80% of all pregnant adolescents in the three target counties served by AAHEP. Care services include activities such as pregnancy counseling, assistance in pre and post-natal care, development of parenting skills, assistance in financial planning and high school completion.

Table 1 shows the potential and actual clients for care in the three target counties for the time 10/1/84-9/30/85. Note that the goal (80%

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*The following project reports are available: First-year Interim (5/83) and Year-end (11/83); Second-year Interim (5/84) and Year-end (12/84); Third-year Interim (5/85) and Year-end (11/85). At least two more years of operation are anticipated. (See References).

service) was exceeded in one county and that the total number of clients served (n=52) is 78 percent of the 80 percent goal (n=66). During the 1984-85 year, AAHEP staff was most successful in Loudon County where it has reached its goal at the 100% level. In the other two counties the goal was not reached at the 80% level but rather at the 53% level in Scott County and the 64% level in Sevier County. This is in contrast to 1983-84 when AAHEP staff was much more successful in reaching its care component goals and had the following results: Loudon, 80%; Scott 100%; Sevier 75%. Inability to achieve the 80 percent goal in 1984-85 (the goal was achieved in 1983-84) may be attributed at least partially to the severe winter of 1984 which drastically interfered with travel in the Appalachian sections of the target counties. Care results are also hindered by client reluctance to enter the care system.

TABLE 1
CARE COMPONENT GOALS AND METHOD OF ESTIMATION OF GOALS: 1984-1985

Target Counties	12-month Computations (clients)			
	Potential		Actual	
	N	80% Goal	N	% of Goal
Loudon	26	21	25	100+
Scott	21	17	9	53
Sevier	35	28	18	64
Total	82	66	52	78

Care services included such things as: counseling, pre-natal care, information on child-care and parenting, introduction to a primary care system (hospital, health clinic), determination of sources of payment for medical services, adoption options, etc. Each care client received extensive, time-consuming, and very personalized services. Over the three years of the project there has been some reduction in low birth-weight babies born to the teenage mothers. (This is a secondary care component goal.) Appendix B contains data on low birth weight and other factors such as abortions, fetal deaths, etc. AAHEP is making progress in all of these areas of concern. The actual number of care cases is relatively small due to the personal nature of care services.

Although the care component results are important, the prevention component has the greatest potential for impact and for achieving a major goal--reducing teenage pregnancy in the area. The primary purpose of this paper is not to address the care component in detail, but rather to report the results of the apparent impact of the prevention component.

PREVENTION COMPONENT RESULTS

The prevention component has made significant progress in all of the targeted high schools in meeting two of its key objectives:

(1) To reach 60 percent of the total school enrollment with at least one significant unit of service
(2) To reach 60 percent of the total students in health classes in the target schools with six significant units of service.

A significant unit of service consists of at least one fifty-minute lecture/discussion session covering material from of the following topic areas: male/female puberty, male/female reproduction, contraception, fetal development, sexually transmitted diseases, decision-making skills and values education.

Table 2 provides data reflecting the progress made toward reaching the preceding objectives. Note that both objectives have been reached in five of the seven high schools, and overall. Within the total service group, there are 5967 students enrolled in the seven target high schools and AAHEP has reached 4278 of these, or 72%. Similarly, the total number of students enrolled in health classes in the seven schools is 1736 and AAHEP has reached 1380 or 75% which is 15% above the stated objective (60%).

Another important AAHEP objective was as follows:

To demonstrate a decline in the incidence of adolescent pregnancies within the AAHEP target counties relative to the number of years of AAHEP activity.

Table 3 provides data on the rates per 1000 live births in the total 15-county area, the 5 target counties, 10 non-target counties and 3 control counties from 1980 to 1984. Data indicate that teen birth rates in target counties have declined from 24.3 in 1982 when AAHEP began to 19.7 in 1984, a decline of 4.6 births/1000 females aged 11-18. In the non-target counties the decline was only 1.6 (26.6 to 25.0); in the control counties there was an increase of 1.4 births per 1000 females, 11-18 (24.7 to 26.1).

TABLE 2
PRIMARY PREVENTION TARGET SITES:
SIGNIFICANT UNITS OF SERVICE
FOR TOTAL SCHOOL ENROLLMENT
AND HEALTH ENROLLMENT
October, 1984 - September, 1985

TARGET SCHOOL SITES	TOTAL SCHOOL ENROLLMENT ONE SIGNIFICANT UNIT				TOTAL HEALTH ENROLLMENT SIX SIGNIFICANT UNITS			
NAME	# Enrolled	60% Goal	# Reached	% Reached	# Enrolled	60% Goal	# Reached	% Reached
Sevier County High	1256	753	980	78	498	298	284	57%
Seymour High School	568	341	216	38	151	91	86	57%
Anderson County High	982	589	756	77	316	190	316	100%
Clinton Sr. High School	960	76	682	71	290	174	290	100%
Rutledge High School	723	433	549	76	177	106	177	100%
Loudon County High School	574	344	517	90	57	34	57	100%
Lenior City High School	904	564	578	64	247	148	170	69%
Totals	5967	3580	4278	72	1736	1042	1380	79%

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TABLE 3
RATES PER 1000 LIVE BIRTHS AND BASELINE RATES IN FIVE TARGET COUNTIES, TEN NON-TARGET, FIFTEEN TOTAL AND THREE CONTROLS, 1980-1984

Baseline Rates 1980-1981 (Based on Actual Numbers)

Five Target Counties	25.8
Ten Non-Target	28.5
Fifteen Counties	27.6
Control Counties	26.6

Five Target Counties

	1980	1981	1982	1983	1984
Total Population	11,737	11,614	11,520	11,424	11,327
Total Births	293	308	280	254	223
Rate/1000 Births	25.0	26.5	24.3	22.2	19.7

Baseline Population -	11,676
Baseline Births -	301

Ten Non-Target Counties

	1980	1981	1982	1983	1984
Total Population	24,697	24,491	24,305	24,113	23,921
Total Births	717	685	648	569	598
Rate/1000 Births	29.0	28.0	26.6	23.6	25.0

Baseline Population -	24,594
Baseline Births -	701

Fifteen Counties

	1980	1981	1982	1983	1984
Total Population	36,434	36,105	35,825	35,537	35,248
Total Births	1,010	993	928	823	821
Rate/1000 Births	27.7	27.5	25.9	23.2	23.3

Baseline Population -	36,270
Baseline Births	1,002

Control Counties	1980	1981	1982	1983	1984
Total Population	4,375	4,354	4,332	4,311	4,292
Total Births	124	108	107	112	112
Rate/1000 Births	28.3	24.8	24.7	25.9	26.1

Baseline Population -	4,365
Baseline Births -	116

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Project staff computed a baseline for comparison purposes. (The rate per 1000 for the two-year period 1980, 1981.) These baseline rates appear at the top of Table 3. Using the baseline rates for comparison, the comparison counties decreased only slightly from 26.6 to 26.1. The AAHEP area showed considerably better decreases; the target counties led the decrease by a considerable margin.

	5-County	10-County	Total	Comparison
Base	25.8	28.5	27.6	26.6
1984	19.7	25.0	23.3	26.1
Decrease	6.1	3.5	3.3	.5

Figure 2 displays data using the percentages (not rates) as a factor of the baseline year for 1982-1984 (projected). Note that the dramatic drop occurs between 1983-1984, an important finding since the revised delivery procedure (target or primary and non-target) was initiated in 1983.

As part of the evaluation attempt to show the benefit of AAHEP to individuals, a relative risk rate has been compiled for each individual county and/or for each group of counties featured in the evaluation. An individual risk rate ratio will identify the probability that any particular individual teenager will become pregnant. This rate can be displayed several ways. First, each succeeding year can be computed against the baseline (the average of 1980 and 1981 years); it can be compared to the control county rates for corresponding years. That information appears in Table 4.

Table 4 shows that the "risk" for a teenager becoming pregnant decreased in the 15-county AAHEP area (27.61 at base to 23.29 in 1984, or a ratio of .84) but remained very stable in the three control counties (26.58 at base to 26.10 in 1984, or a ratio of .98). Column C shows that considerable declines (.10 or more) occurred in 11 of 15 AAHEP counties (73%) but only in 1 of 3 (33%) control counties. Four of five target counties recorded reductions ranking among the best of the reductions (.72, .80, .61 and .82). Column D shows the relationship of each county to the rate for the 15-county area at baseline, and Column E shows each county's relationship to the 15-county rate in 1984. A decline from column D to column E shows an absolute gain within the 15-county area. There are eight declines from column D to column E, and the five target counties accounted

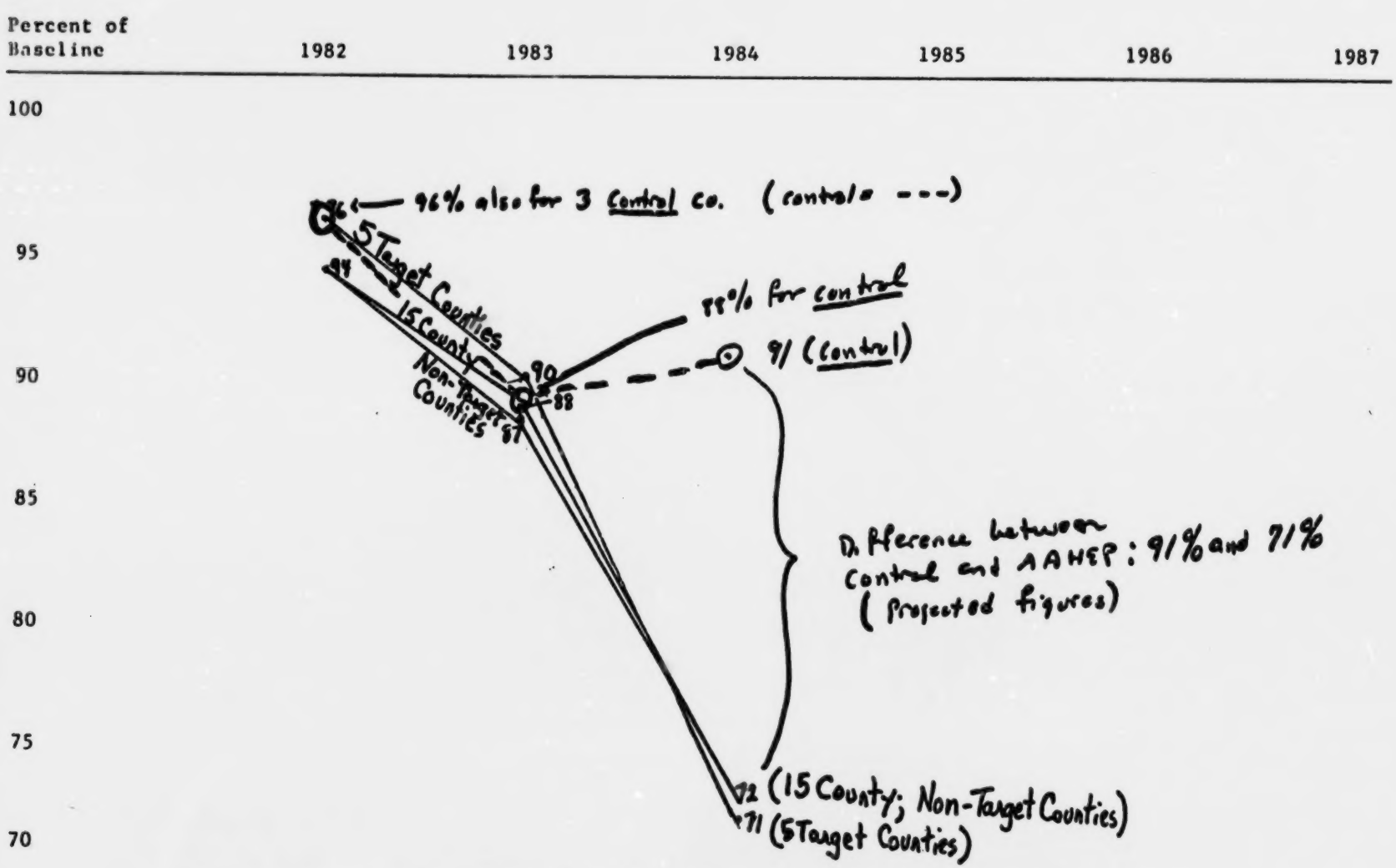

Figure 2. Comparison of Percent of Yearly Number of Live Births to Mothers Aged 12-19, 15 County AAHEP Area, 5 County Target Area and Non-Target Counties, 1982-1987

TABLE 4

"Risk Ratio" Computations: AAHEP, 1980-1984
Relative to Teenage Pregnancy, Baseline to 1984

County	Rate/1000		Individual Risk Ratios				
	A	B	C	D	E	F	G
	Baseline	1984	1984÷Base A÷B	Base÷Tot. (27.61)	1984 (23.29)	Base (26.58)	1984 (26.10)
* 1. Anderson	23.82	17.22	.72	.86	.74	.90	.66
2. Blount	23.87	20.73	.87	.86	.89	.90	.79
3. Campbell	36.67	28.73	.78	1.33	1.23	1.38	1.10
4. Claiborne	22.88	20.43	.89	.83	.88	.86	.78
5. Cocke	35.69	32.17	.90	1.29	1.38	1.34	1.23
* 6. Grainger	26.78	21.31	.80	.97	.91	1.01	.82
7. Hamblen	27.52	21.03	.76	.99	.90	1.04	.81
8. Jefferson	23.55	24.85	1.06	.85	1.07	.87	.95
* 9. Loudon	19.35	20.30	1.05	.70	.87	.73	.78
10. Monroe	32.96	33.32	1.01	1.19	1.43	1.24	1.28
11. Morgan	32.82	26.29	.80	1.19	1.13	1.23	1.01
12. Roane	26.86	24.76	.92	.97	1.06	1.01	.95
*13. Scott	32.82	22.50	.61	1.33	.97	1.38	.86
*14. Sevier	25.07	20.69	.82	.91	.89	.94	.79
15. Union	32.38	25.51	.79	1.17	1.09	1.22	.98
16. Total	27.61	23.29	.84	1.00	1.00	1.04	.89

Baseline is combined 1980-1981 teen pregnancy rate/1000				H Base (15) (26.58)	I 1984 (15) (26.10)	J (27.61)	K (23.29)
17. Hancock	31.58	30.63	.97	1.19	1.17	1.14	1.32
18. Hawkins	23.40	24.64	1.05	.88	.94	.85	1.06
19. Polk	33.54	28.33	.84	1.26	1.09	1.21	1.22
20. Total	26.58	26.10	.98	1.00	1.00	.96	1.12

*Target Counties

Risk Ratio (Total) 15 Co.÷Control. Base=1.04 (27.61÷26.58); 1984=.89 (23.29÷26.10). Base to 1984 Change in Risk Ratio: Control (.98) (26.10÷26.58); 15 Co. (.84) (23.29÷27.61).

A=1980-81 Combined Rate/1000
B=1984 Rate/1000
C=1984 Rate Divided by Base (A÷B)
D=Base (Col. 1) for Each Co.÷Base for 15 Co. (Line 16, Col. A:27.61)
E=1984 (Col. B) for Each Co.÷1984 Tot. for 15 Co. (Line 16, Col. B:23.29)
F=Base (Col. A) for Each Co.÷Base for 3 Control Co. (Line 20, Col. A:26.58)
G=1984 (Col. 13) for Each Co.÷1984 Tot. for 3 Control Co. (Line 20, Col. 13:26.10)
H=Base (Col. A) for Each Control÷Base for 3 Control Co. (Line 20, Col. A:26.58)
I=1984 (Col. A) for Each Control÷1984 Tot. for 3 Control Co. (Line 20, Col. B:26.10)
J=Base (Col. A) for Each Control÷Base for 15 Co. (Line 16, Col. A:27.61)
K=1984 (Col. A) for Each Control÷1984 for 15 Co. (Line 16, Col. B:23.29)

for 4 of the 8. Columns F and G show individual county relationships to the total rates for the control counties for base and 1984. Nine of 15 AAHEP counties exceeded the control base rate (Col. F) but only 4 of 15 AAHEP counties (and none of the target counties) exceeded the control rate in 1984 (Col. G). Columns H-K provide similar comparisons for the control counties.

CONCLUSIONS

During its three years of operation, the AAHEP has undergone a variety of changes in operational procedures, staff members and plans for evaluation. The project staff currently works intensively in five target counties to provide both care and prevention services. Because of previous obligations, the AAHEP staff also works in 10 non-target areas, although these services are provided on an "as available" basis.

The evaluators have modified their evaluation design as the project implemented changes suggested by the Washington D.C. office. The current format of the evaluation design allows comparisons to be made among target, non-target and control counties to address AAHEP's success in meeting the stated goals and objectives.

The AAHEP project has had outstanding success in meeting its prevention goals and considerable success in meeting its care component goals. In particular, AAHEP services appear to have reduced the incidence of adolescent births to a larger degree in counties where service has been more intense (target counties). This suggest that AAHEP is functioning successfully to prevent adolescent pregnancy, which has been identified as a major health and social problem in the mid-South region.

Figure 3 is a newspaper account explaining details of the teen pregnancy problem. These types of data support the need for AAHEP, and results of this evaluation show that AAHEP is helping to decrease these high rates. The AAHEP strategies, specially of delivering prevention services through schools, may be worthy of replication.

Teen pregnancy rate down, still double other countries

Gannett News Service

WASHINGTON — The rate of teen-age pregnancy in the United States decreased over the past 20 years, but rates for blacks are a third higher than for whites and overall U.S. statistics are more than double those of other developed countries, a panel of experts testified at a congressional hearing Tuesday.

A new, 18-month study by the Alan Guttmacher Institute showed teen birth rates here twice as high as Canada, England and Wales, three times as high as Sweden, and seven times higher than the Netherlands, said research director Jacqueline Darroch Forrest.

All five have more public sex education programs and easily available contraceptives — and all five also have much lower teen abortion rates, she said.

"One of the lessons we can learn from these other countries is that we can lower the abortion rate as well," said Forrest.

Forrest said the study shattered several other myths about teen pregnancy:

■ All five other countries have more generous welfare benefits, showing that alone doesn't encourage early pregnancy.

■ Teen pregnancy rates were lowest in countries with greater availability of contraceptives and counseling, as well as sex education in schools. One month of the pill here costs about $10. In France, it's $1 or less, she said.

■ The U.S. rate is not a black or hispanic phenomenon, since white rates alone outstrip total rates for the other nations.

■ Young teen-agers are not too immature to use contraceptives, especially the pill, which is used much more frequently abroad than in the United States.

■ Almost three-fourths of the American teens who get pregnant say the child is unwanted. Half opt for abortions. One-third of the 13 million abortions since 1973 were performed on girls 12-19.

Many points in the study were echoed by Wendy Baldwin, chief social demographer of the National Institute of Child Health and Human Development.

She said there is no evidence sex education encourages activity, and some evidence it prevents unwanted pregnancy. Teens are least likely to use contraceptives when first beginning sexual activity, when they are most at risk. Information from parents is of little help; she said most parents know little more about sex and sexuality than their children.

The impact of teen pregnancies — 270,000 births to unwed teens in 1982 — is a serious health problem, said Rep. Henry Waxman, D-Calif., of the subcommittee on health and the environment, who called the meeting with Rep. Robert Garcia, D-N.Y., of the subcommittee on census and population.

The maternal death rate for teen mothers is more than twice that of women in their 20s — and their babies are twice as likely to die, or have health problems.

Teen mothers may go back to school, but they never catch up educationally with girls who waited to have children. Teen fathers find themselves lagging behind their peers in income 10 years later. Parents often take over support and care of the "babies who have babies." Seventy percent live with parents at time of childbirth; five years later, more than a third are still at home.

Telling young people to postpone sex is not enough, said Rep. James H. Scheuer, D-N.Y.

He said 80-90 percent of Catholics and Protestants approve giving contraceptive information to teens. "Among all religious groups, the people are ahead of the leaders," he said.

"That's a fact lawmakers haven't absorbed yet."

Figure 3. Recent Newspaper Article on Teen Pregnancy in AAHEP Area.

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Other Reports

Births and Fertility Rates for States, NCHS, Series 21, No. 42.

APPENDIX A

1980 TEENAGE BIRTH RATE[1] BY STATE

Source: Birth & Fertility Rates for States, NCHS, Series 21, No. 42

USA = 53.0

Mississippi	= 83.7	Idaho	= 59.5	Maine	= 47.4
Wyoming	= 78.7[2]	Nevada	= 58.5	Washington	= 46.7
Louisiana	= 76.0	Florida	= 58.5	Nebraska	= 45.1
Oklahoma	= 74.6	Missouri	= 57.8	Michigan	= 45.0
Arkansas	= 74.5	Indiana	= 57.5	Maryland	= 43.4
Texas	= 74.3	North Carolina	= 57.5	Iowa	= 43.0
Kentucky	= 72.3	Kansas	= 56.8	North Dakota	= 41.7
Georgia	= 71.9	Illinois	= 55.8	Pennsylvania	= 40.5
New Mexico	= 71.8	California	= 53.3	Vermont	= 39.5
Alabama	= 68.3	South Dakota	= 52.6	Wisconsin	= 39.5
West Virginia	= 67.8	Ohio	= 52.5	Minnesota	= 35.4
Arizona	= 65.5	Delaware	= 51.2	New Jersey	= 35.2
Utah	= 65.2	Oregon	= 50.9	New York	= 34.8[3]
South Carolina	= 64.8	Hawaii	= 50.7	New Hampshire	= 33.6
Alaska	= 64.4	Colorado	= 49.9	Rhode Island	= 33.0
Tennessee	= 64.1	Montana	= 48.5	Connecticut	= 30.5
D.C.	= 62.4	Virginia	= 48.3	Massachusetts	= 28.1

Please Note: Although rate may be high, absolute numbers of teen births may be less.

1 = Rate = $\frac{\text{Age 15-19 Births}}{\text{Age 15-19 Population}}$ Per 1,000

2 = Wyoming = $\frac{1,619}{20,571}$ = 78.7

3 = New York = $\frac{27,697}{795,890}$ = 34.8

Table B-1

Number and Percent of Yearly Number of Low Weight Births to
Mothers Aged 10-19, By Trimester of Initial Pre-Natal Care
15 County AAHEP Area, 5 County Target Area and Non-Target Counties
1980-1984

Trimester	Year[x]	N	A n	A % **	N	B+ n	B+ % **	N	A-B[D] n	A-B[D] % **
Unknown	80	30	4	13.3	2	1	50.0	28	3	10.7
	81	33	5	15.2	3	2	66.6	30	3	10.0
	82	51	4	86.2	5	1	20.0	46	3	6.5
	83	24	7	29.2	4	2	50.0	20	5	20.0
	84	27	3	11.1	6	2	33.3	21	1	4.8
	85									
	86									
	87									
None	80	23	1	4.3	6	0	0	17	1	5.9
	81	16	3	18.8	10	1	10.0	6	2	33.3
	82	38	13	34.2	11	6	54.5	27	7	25.9
	83	20	7	35.0	5	2	40.0	15	5	33.3
	84	9	2	22.2	4	2	0	5	0	0
	85									
	86									
	87									
First	80	824	75	9.1	255	23	9.0	569	52	9.1
	81	792	67	8.5	265	18	6.8	527	49	9.3
	82	715	63	8.8	233	16	6.9	482	47	9.8
	83	679	56	8.2	223	16	7.2	456	40	8.8
	84	561	39	7.0	164	8	4.9	397	31	7.8
	85									
	86									
	87									
Second	80	530	35	6.6	166	11	6.6	364	24	6.6
	81	519	43	8.3	152	13	8.6	367	30	8.2
	82	505	50	9.9	156	13	8.3	349	37	10.6
	83	480	43	9.0	141	12	8.5	339	31	9.1
	84	404	42	10.4	129	22	17.1	275	20	7.2
	85									
	86									
	87									
Third	80	98	6	6.1	16	2	12.5	82	4	4.9
	81	113	9	8.0	30	1	3.3	83	8	9.6
	82	99	5	5.1	28	2	7.1	71	3	4.2
	83	108	4	3.7	34	1	2.9	74	3	4.1
	84	66	8	12.1	17	4	23.5	49	4	8.2
	85									
	86									
	87									

[x] - 1984 figures are projected
*A - Low weight births in 15 county AAHEP area
+B - Low weight births in 5 county target area
[D]A-B - Low weight births in non-target counties
N - Total number of mothers receiving initial pre-natal care each trimester
n - Number of mothers receiving initial pre-natal care each trimester later bearing low birth weight babies
** - Percent based on $\frac{n}{N}$

TABLE B-2

SUMMARY: BIRTHS AND LOW BIRTH WEIGHT (LBW) BABIES TO TEEN (12-19) MOTHERS IN 3 CONTROL COUNTIES AND AAHEP AREA BY TOTAL, PRIMARY AND NON-PRIMARY COUNTIES

	1980	1981	BASE	1982		1983		1984		1985		1986		1987	
				N	%	N	%	N	%	N	%	N	%	N	%
Control (3)															
Births	191	172	181	173	96	160	88	164	91*						
LBW	11	15	13	17	131	17	131	12	92*						
AAHEP															
Births (total)	1505	1473	1489	1403	94	1311	88	1067	72*						
Primary (5)	445	460	452	433	96	407	90	321	71*						
Non-Primary (10)	1060	1013	1036	970	94	904	87	746	72*						
LBW (total)	121	127	124	135	109	117	94	94	76*						
Primary (5)	37	35	36	38	106	33	92	38	106*						
Non-Primary (10)	84	92	88	97	110	84	95	56	66*						

BASE = 1980 + 1981 ÷ 2
% = Percent of BASE

CONTROL: Three similar counties: Hancock, Hawkins, Polk
AAHEP: Primary Counties (5); Non-Primary (10); Total = 15

NOTE: AAHEP began operation in Fall, 1982; AAHEP divided area into Primary/Non-Primary in Early 1984.

* 1984 Figures are estimates.

TABLE B-3

Number of Abortions, Live Births and Fetal Deaths of Mothers Aged 12-19, 15 County AAHEP Region, 5 County Target Area and Non-Target Counties, 1980-1984

	Number of Abortions								Number of Live Births								Number of Fetal Deaths							
	80	81	82	83	84*	85	86	87	80	81	82	83	84*	85	86	87	80	81	82	83	84+	85	86	87
Total 15 County AAHEP Region	605	550	570	538	547				1505	1473	1403	1311	1067				14	10	6	9				
Total 5 Target AAHEP Counties	222	182	201	191	180				445	460	433	407	321				3	5	3	4				
Total Non-Target Counties	383	368	369	347	367				1060	1013	970	904	746				11	5	3	5				

B-3

*Projected figure
+No data available

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